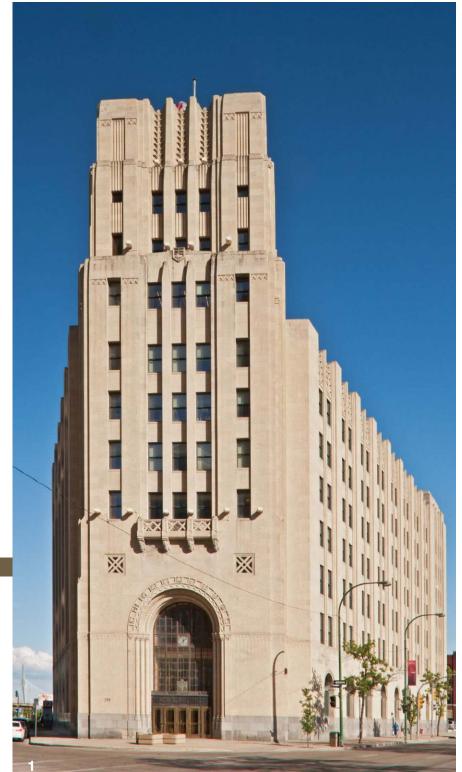
Case STUDY Historic VICTORY BUILDING Retrofits Entrance and Lobby

IGHT YEARS AGO AMBICO Limited was approached by the owner of the stunning art deco Canadian federal government structure known as the Victory Building to design and manufacture retrofit doors at the entrance and lobby. The building, well-known in Winnipeg, Manitoba, was built in the 1930s in the midst of the Great Depression and has been situated in the downtown core of that provincial capital for 80 years. Its striking edifice was surely meant to inspire and support the local prairie community that was suffering economically at that time.

Heritage architects of the Public Works Department of the Canadian government worked with AMBICO engineers to replicate doors that would complement the original design intent of the building's design team. Michael Plett, AHC, of Penner Doors and Hardware was on site and coordinated communications between all parties involved in the door and frames retrofit project.

By Jack Shinder

Winnipeg architect George William Norwood designed the building in the early 1930s in the modified art deco architectural style that was popular at that time. At a later date, the Canadian Federal Heritage Buildings Review Office classified the building as a heritage property because of its historical, architectural and environmental significance. In 2005 it was named "Victory Building" in honor of



Front view of Victory Building after completion of the main door retrofit

STAKEHOLDERS

AMBICO Project Manager: Stuart Brodie AMBICO Sales Representative: Don Lopatka, AHC, FDAI, DDL Group AMBICO Manufacturing Team Representative: Rui Gomes AMBICO Marketing: Pat Parker Conservation Architect Public Works Canada: Bernard Flaman Contractor, Fresh Projects: Aman Chana Distributor: Michael Plett, AHC, Penner Doors & Hardware

those who served their country in times of conflict and peacekeeping.

Those involved in the retrofit project recognized that a high level of expertise, guidance and technical knowledge would be required with respect to the restoration of several doors and frames. The project called for the retrofitting of those openings found at the impressive main entrance to the building. A number of interior openings on the ground level were also in need of refurbishment, and it was determined that they would receive the recognition and attention they deserved.

The phase of the retrofit that called for the fabrication and installation of the doors and frames began in the summer of 2013 and was completed in the spring of 2014. This is not to say that this portion of the project was completed in a matter of months-the finished door and frame products were the culmination of years of collaboration involving the Government of Canada (building owner), the project architect, project managers, AMBICO's representative in Manitoba, AMBICO's distributor, suppliers of ornamental hardware, and the sales, design, engineering and manufacturing teams of AMBICO Limited. Knowing that this project had the capacity to be unique, AMBICO Marketing Manager Pat Parker decided to

engage a well-known local photographer to create a visual record of the project.

To maintain the integrity of the heritage designation of this building and to restore the selected openings to their original stunning appearance, doors and frames were clad in bronze in accordance with the original design criteria, and one interior clad door was etched to elled to the site to coordinate with those involved in the design and installation of the door and frame assemblies. A close relationship with Penner Door and Hardware's Mike Plett, AHC, in Winnipeg assured Ottawa-based AMBICO (which is 1,500 miles from the project) that they were well represented on site at all times.

AMBICO's team visited the project prior to the commencement of work to assess the condition of the site, and they also made a final visit as the project neared completion to fine-tune the installation. Project Manager Stuart Brodie was a key part of the team, coordinating myriad details with the project architect, the local distributor and the general contractor, as well as with AMBICO's suppliers and its own

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accommodate current UL10c fire standards, as well as to complement the design intent of the jewel-like lobby. Architectural hardware in solid bronze was designed to accommodate modern egress requirements while not compromising the art deco style favored by the original building architect.

Site Coordination

Projects such as this are unique in many respects, and AMBICO's approach was a company-wide commitment to the painstaking details that enabled the final products to meet the demands of all parties involved.

From the outset of the project, experienced members of AMBICO's sales and manufacturing staff travfactory personnel. AMBICO's lead hand, Rui Gomes, attended the site throughout the final phase, making certain that the finished product reflected the fine details that made this project one for the ages.

Bronze Cladding

The doors, frames and custom push/pull architectural hardware were manufactured from bronze C280 sheet bronze. This material has several qualities: ease of welding, high ductility, high impact strength and a distinctive color, which make it desirable for this type of application.

The ornamental push/pull hardware was fabricated from C385 round bar bronze, which affords all those qualities required for the push/pull type of architectural hardware found on the main entrance doors. This hardware, for both interior and exterior assemblies, was copied from typical designs from the era, as the original hardware was lost when the building was retrofitted 40 years ago.

Main Entrance Doors, Frames, Sidelites and Hardware

With one exception, doors throughout the project were made to fit the existing frames *in situ*. However, in the case of the one stairwell door, the need to comply with NFPA fire standards was essential.

The design of the new doors elsewhere in the lobby was not at all suited to fire label procedures, so it was determined that a flat door face would be etched in a design which would simulate the design pattern of the new stile and rail doors. This met the heritage architect's demand, as well as those of the fire marshal.

The "before" and "after" images in photos #2 and #3 demonstrate the final result of this retrofit, in which the goal was to return the bank of doors at the main entrance to the building to their original beauty. When completed, the enhanced building façade simply cannot be overstated. It is depicted in these photographs which were taken to include the spectacular, arched building front. Photo #2 shows the doors as found prior to the retrofit clad in bronze anodized aluminum originating from the early 1960s. Photo #3 shows the doors as they now appear to those entering the building.

The entrance consists of two banks of doors—one faces the outside of the building, while the second bank is located just inside the entrance across a small vestibule, providing an interior line of identical doors.



"Before" picture of the main entrance façade as it appeared before commencement of the project



"After" view of the entire front façade, with doors replaced and bronze area above the doors cleaned and polished. Other items have been removed from the glass panels above the entryway.



"Before" shot of the front entrance bank of doors, sidelites and frames clad in anodized aluminum from the 1960s retrofit

Completed retrofit of front doors, sidelites and frames, showing the beautiful push/pull bronze rod hardware





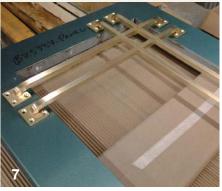
The interior bank of doors, frames, sidelites and hardware capture the beauty of the entranceway as seen from the main lobby looking outward.

This photo demonstrates the care and precision required in the installation of the architectural hardware designed for the two banks of doors at the main entrance of the building.

Both door assemblies consist of three doors and two sidelites bookending each bank. The door assemblies are highlighted by the architectural push/pull bronze bar hardware found on each of the swing door openings and side panels. Photos #4 and #5 are closeup views of the "before" and "after" of the bank of exterior-facing doors.

Main Entrance Door Hardware

As a result of the exactness required in its installation, the door hardware was factory pre-installed by the skilled workers at AMBICO's factory. Photo #7 shows the layout for the hardware installation in the AMBICO factory on one of the front



entrance doors. It clearly demonstrates the care necessary and the level of precision required for this type of hardware installation and is indicative of the attention to detail that is required to meet the unique demands of a project such as this.

The Etched, Fire-Rated Door

One particular door—a single swing door—is worthy of special mention and demonstrates the difficult decisions that sometimes must be made during this type of retrofit. The door pictured in photographs #8 and #9 (next page) is at the entrance to a stairwell located on the ground floor just inside the main foyer. The "before"



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"Before" photograph of painted hollow metal door to stairwell

photograph shows it as it was—a typical painted hollow metal door, the result of an earlier retrofit.

This door is in close proximity to another single, swing-type door, seen in photo #10, which leads to the public telephones area. This door panel was an original door; it is bronze and paneled. The etched, bronze-clad door as seen in photo #9 was designed to closely match the existing door situated beside it.

The engineering team at AMBICO collaborated with the Conservation Architect at Public Works Canada, Bernard Haman, to ensure that the door complied with code to meet or surpass a UL10C fire rating (90 min. positive pressure). The result is stunning. Comparing the doors in photos #9 and #10, one would be hard pressed, if asked, to select the original of the two!

Interior Double Swing Doors

The interior of the building's ground floor opens into the main lobby through a pair of stunning



"After" photograph of door to stairwell, etched and fire-rated



Bronze-clad double swing doors leading from the interior of the building into the main foyer and front entrance of the building

bronze-clad doors with full lites. They sit at the top of a small staircase and are complemented by a brass stair rail, visually drawing the eye to the doors.

The interior walls are made of attractive Tyndall stone, which is indigenous to Manitoba and is an essential design feature of the original lobby. Photo #11 captures the beauti-



Photograph of original bronze door to public telephones area and a model for door in photo #9

ful effect of the bronze door assembly set into the decorative stone archway and surrounding walls.

Summary

The retrofit of the Victory Building is fine example of the impact of the openings on a heritage building when restoring it to its former glory. In many cases, due to economies at the time, buildings given a heritage or historical designation weren't actually "glorious" in their origins. However, they may become so through the vision of architects and others involved in a restoration or retrofit.

The Victory Building, built during the Great Depression and prior to World War II, has definitely improved with age and is a fitting structure to honor those who have served their country.



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